

3-053 FOOTHILL

Basin Boundaries

Summary

The Foothill groundwater basin is located in southeastern Santa Barbara County. The basin consists of unconsolidated Pliocene and younger sedimentary deposits and is bound by faults and low permeability rocks. The Goleta Fault bounds the basin on the northwest, and consolidated Tertiary sedimentary rocks of the Santa Ynez Mountains form the northern and eastern boundaries of the basin. The basin is bound on the south by the Mission Ridge Fault and the More Ranch Fault. The Mesa Fault and Modoc Fault separates the basin from the adjoining Goleta groundwater basin to the west. Numerous canyons overlie the basin at the base of the Santa Ynez Mountains. The creeks that drain the canyons flow southwesterly and are tributary to Atascadero Creek. Average annual precipitation across the basin ranges from 17 to 19 inches. The basin boundary is defined by five (5) segments detailed in the descriptions below.

Segment Descriptions

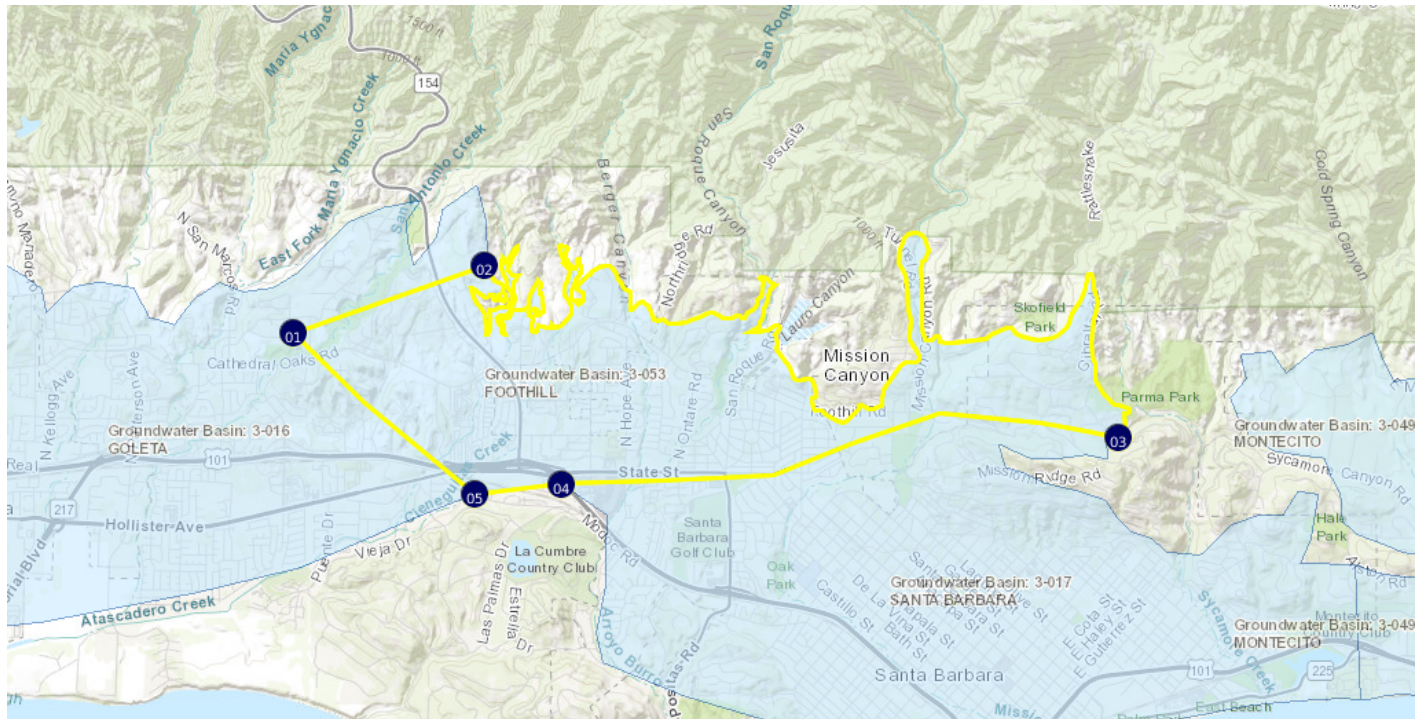
<u>Segment Label</u>	<u>Segment Type</u>	<u>Description</u>	<u>Ref</u>
1-2	^I Fault	Begins with point (1) and follows the Goleta Fault to point (2).	{a}
2-3	^E Alluvial	Continues from point (2) and generally follows the contact of Quaternary alluvium with various Tertiary sedimentary rock units of the Santa Ynez Mountains to point (3).	{b}
3-4	^I Fault	Continues from point (3) and follows the Mission Ridge fault to point (4).	{c}
4-5	^E Fault	Continues from point (4) and follows the More Ranch fault to point (5).	{a}
5-1	^I Fault	Continues from point (5) and follows the Modoc fault and ends at point (1).	{a}

Significant Coordinates

<u>Point</u>	<u>Latitude</u>	<u>Longitude</u>	
1	34.454637983	-119.788097111	
2	34.461582851	-119.7642184	
3	34.443864601	-119.685143163	
4	34.439184072	-119.754610614	
5	34.438089429	-119.765392629	

Map

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<https://sgma.water.ca.gov/webgis/?appid=160718113212&subbasinid=3-053>

References

<u>Ref</u>	<u>Citation</u>	<u>Pub Date</u>	<u>Global ID</u>
{a}	United States Geological Survey (USGS), Geohydrology of the Foothill Ground-Water Basin Near Santa Barbara, California, Water Resources Investigations Report 89-4017, J.R. Freckleton.	1989	42
{b}	United States Geological Survey (USGS), Geologic Map of the Santa Barbara Coastal Plain Area, Scientific Investigations Map 3001, 1:24,000, Minor, et.al.. http://pubs.usgs.gov/sim/3001/	2009	72
{c}	California Geological Survey (CGS), Geologic Atlas of California Map No. 008, Los Angeles Sheet, , 1:250,000, Charles W. Jennings and Rudolph G. Strand.URL: http://www.quake.ca.gov/gmaps/GAM/losangeles/losangeles.html	1969	33

Footnotes

- I: Internal
- E: External